

### **REMARKS**

Claims 1-7, 9, 11-22, 24, 26, 28-30, and 33 were rejected and remain pending. The specification has been amended herein to correct two typographical errors as suggested by the Examiner. No new matter has been added.

In light of the following remarks, Applicants respectfully request reconsideration and allowance of claims 1-7, 9, 11-22, 24, 26, 28-30, and 33.

#### Examiner Interview

Applicant's attorney thanks Examiner Lucas and Examiner Housel for the courtesy of the telephonic interview on December 15, 2005. The substance of this telephonic interview involved the rejections and comments presented herein.

#### Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 under 35 U.S.C. § 112, first paragraph, allegedly because the specification, while being enabling for the claimed methods for reducing the number of viable cancer cells in a mammal comprising the administration of Edmonston measles virus strains identified in the present application, does not reasonably provide enablement for methods of reducing cancer cells using any attenuated measles virus.

Applicants respectfully disagree. A person having ordinary skill in the art reading Applicants' specification at the time of filing would have been able to make and use the presently claimed invention without undue experimentation. In fact, no undue experimentation is needed for a person having ordinary skill in the art to follow Applicants' specification to (1) obtain an attenuated measles virus, whether an Edmonston measles virus strain or not, that is capable of reducing the number of viable cancer cells in a mammal, and (2) administer the obtained attenuated measles virus to a mammal, thereby reducing the number of viable cancer cells in that mammal. This is particularly true given the working examples provided in Applicants' specification.

In light of the above, Applicants respectfully request withdrawal of the rejections of claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 under 35 U.S.C. § 112, first paragraph.

The Examiner also rejected claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Applicants respectfully disagree. A person having ordinary skill in the art reading Applicants' specification at the time of filing would have appreciated that Applicants invented the presently claimed invention. This is particularly true given that a person having ordinary skill in the art reading Applicants' specification as well as the Takeda *et al.* reference would not have concluded, as the Examiner has done, that the art is so unpredictable that the present claims lack written description. Applicants' specification provides extensive teachings regarding the claimed invention in addition to providing working examples. When read as a whole, a person having ordinary skill in the art would have appreciated that Applicants' specification provides an adequate written description of the presently claimed invention.

In light of the above, Applicants respectfully request withdrawal of the rejections of claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 under 35 U.S.C. § 112, first paragraph.

#### Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-7, 9, 11-17, 20-22, 24, 26, and 28-33 under 37 U.S.C. § 103(a) as allegedly being obvious in light of the Bateman *et al.* reference, the Usonis *et al.* reference, the Linardakis reference, the Bateman abstract, the Taqi reference, the Bluming reference, and the Johnston reference. The Examiner also rejected claims 16 and 17 under 35 U.S.C. § 103(a) as allegedly being obvious in light of the Bateman *et al.* reference in view of either the Weibel reference or the Usonis reference, and in view of either the Asada reference or the Sato *et al.* reference, and further in light of the Linardakis reference, the Bateman abstract, the Taqi reference, the Bluming reference, and the Johnston reference. In addition, the Examiner rejected claims 18 and 19 under 35 U.S.C. § 103(a) as allegedly being obvious in light of the Bateman *et al.* reference, in view of either the Weibel reference or the Usonis reference, further

in view of the Duprex reference, and in light of the Linardakis reference, the Bateman abstract, the Taqi reference, the Bluming reference, and the Johnston reference. Further, the Examiner rejected claim 20 under 37 U.S.C. § 103(a) as allegedly being obvious in light of either the Galanis *et al.* reference or the Russell *et al.* reference (*Proc. Am. Assoc. Cancer Res.*, 41:259, abstract 1648), in view of either the Weibel reference or the Usonis reference, and further in light of the Linardakis reference, the Bateman abstract, the Taqi reference, the Bluming reference, and the Johnston reference.

Applicants respectfully disagree with these rejections. The presently claimed invention recites a method for reducing the number of viable cancer cells in a mammal by administering attenuated measles virus to the mammal under conditions wherein the number of viable cancer cells in the mammal is reduced. In contrast to the Examiner's assertions, the combinations of cited references fail to teach or suggest that a person having ordinary skill in the art should carry out the presently claimed methods. For example, at no point do any of the cited references suggest that an attenuated measles virus can be administered to a mammal to reduce the number of viable cancer cells in the mammal. Applicants' originally filed specification, on the other hand, discloses the surprising finding that attenuated measles viruses, when administered to a mammal, prevents tumor growth (see, e.g., page 22), decreases the rate of tumor progression (see, e.g., page 23 and Figures 2B and C), and causes tumor regression (see, e.g., page 23 and Figure 2A). Thus, taken together, the combinations of cited references do not render the presently claimed invention obvious.

In light of the above, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103.

The Examiner rejected claims 1-7, 9, 11-15, 18-21, 24, 28-30, and 33 under 37 U.S.C. § 103(a) as allegedly being obvious in light of U.S. Patent No. 6,896,881.

Applicants respectfully disagree and submit the following:

**The instant application and U.S. Patent No. 6,896,881 were, at the time the invention of the instant application was made, owned Mayo Foundation for Medical Education and Research, by virtue of the fact that the listed Applicants of the instant application and the named inventors of U.S. Patent No. 6,896,881 assigned or were obligated to assign their rights to Mayo Foundation for Medical Education and Research.**

In light of the above, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103(a) based on U.S. Patent No. 6,896,881.

Obviousness-type double patenting rejection

The Examiner provisionally rejected claims 1, 18, and 19 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of co-pending U.S. Patent Application No. 11/125,940.

Applicants respectfully disagree. In addition, Applicants respectfully submit that claim 1 of co-pending U.S. Patent Application No. 11/125,940 was cancelled by virtue of a preliminary amendment filed June 30, 2005. Thus, this provisional rejection is moot.

**CONCLUSION**

Applicants submit that claims 1-7, 9, 11-22, 24, 26, 28-30, and 33 are in condition for allowance, which action is requested. The Examiner is invited to call the undersigned attorney at the telephone number below if such will advance prosecution of this application. The


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Commissioner is authorized to charge any fees or credit any overpayments to Deposit Account  
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Respectfully submitted,

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